

**RESPONSE TO COMMENTS  
(Dated 16 September 2005)**

**BEAR VALLEY WATER DISTRICT  
WASTEWATER TREATMENT PLANT  
ALPINE COUNTY**

**TENTATIVE WASTE DISCHARGE REQUIREMENTS  
WDR NO. 5-01-208**

**CENTRAL VALLEY REGIONAL WATER QUALITY  
CONTROL BOARD  
11020 Sun Center Drive # 200  
SACRAMENTO, CA 95670**

# **BEAR VALLEY WASTEWATER TREATMENT PLANT**

## **COMMENTS RECEIVED FROM THE INTERESTED PARTIES**

The Tentative NPDES Permit (Order) and associated Reporting and Monitoring Program, and Fact Sheet for the Bear Valley Water District (Discharger) prepared by the Central Valley Regional Water Quality Control Board (RWQCB) staff were originally issued for public review on 15 March 2005. ECO:LOGIC (Discharger's Engineer), State Department of Health Services and the Stockton East Water District have submitted comments on April 25, April 13, and April 15, 2005, respectively. Since the comments received on the Order were substantial, a second Tentative NPDES Permit with necessary revisions was issued for public review on 9 September 2005. The following responses correspond to the comments submitted by individual stakeholder and they are arranged in the same order as they are received.

### **Comments Received From the Department of Health Services (April 13, 2005)**

Department asserts it is their basic policy that there should be no discharge of sewage effluent to domestic water supply. They contend that an approval of the permit;

**Comment**      1. Would establish a precedent for other rapidly growing mountain and foothill communities for surface water discharge and opens the door for similar activities by other utilities in the region.

**Response**      Comment noted. However, it is not the responsibility of the RWQCB to regulate and/or monitor the growth of a community. The proposed permit incorporates stringent discharge limits and necessary studies to ensure that water quality of the receiving stream is fully protected. In addition, the proposed permit prohibits discharge prior to the District maximizing land disposal and justifies the need for surface discharge, which is the same requirement for all other foothill communities considering a surface water discharge.

**Comment**      2. Would accelerate growth to a point that would necessitate discharges to surface water year-around due to loss of available land, and would encourage rejection of other more attractive land disposal alternatives for economic reasons.

**Response**      Comment noted. It is not RWQCB's role to make land use policy decisions. The District has evaluated the feasibility of many options to contain effluent on land and eliminate the need for surface water discharge. However, the proposed permit prohibits surface water discharge prior to utilizing all available land for disposal and all feasible means of maximizing land disposal have been employed to target emptying the effluent storage reservoir by the end of irrigation season. Furthermore, the District is also required to demonstrate that

there is no suitable land available to store effluent volumes in excess of the storage capacity except through condemnation and that lawful discharge to Bloods Creek is the only means available to them during wet winters.

- Comment**      3. Would be in violation of the USEPA's Drinking Water Source Assessment and Protection Program, which requires the implementation of proactive measures to prevent the pollution of drinking water source by providing the most cost effective method of ensuring the safety of drinking water supplies.

**Response**      The revised Tentative Order requires the full implementation of the Land Maximization Plan as a means of minimizing discharge to surface waters. Compliance with the proposed NPDES Order will result in no significant impact to beneficial uses of the receiving water. There are no known municipal uses of the receiving water for many miles down stream of the receiving water. However, there are domestic and recreational uses about three miles downstream of the receiving water. Furthermore, the Department of Health Services has recommended on previous NPDES permits that treated domestic wastewaters discharged to surface waters where a minimum of 20 to 1 dilution is not present should be treated to tertiary levels to protect public health. The proposed Order requires a minimum dilution of 20 to 1, stream volume to effluent volume, be demonstrated prior to discharge. Flow of the receiving water is required to meet this demonstration, which is consistent with both the DHS's wastewater treatment standards for reclamation and the approach taken by Regional Board staff in the permits issued for other similar discharges. Hence, the proposed Tentative Order is considered to be in compliance with the Drinking Water Source Assessment and Protection Program.

- Comment**      4. Would degrade the water quality and the environment of the Lower San Joaquin River and the Delta.

**Response**      Regional Board staff recognizes the importance of protecting the beneficial uses of the receiving stream. All the beneficial uses of the receiving water were evaluated by Regional Board staff and appropriate effluent limitations have been included in the proposed permit. By protecting the beneficial uses of the receiving water, this permit is also protective of the water quality and the environment of both the lower San Joaquin River and the Delta.

- Comment**      5. Would be a disincentive to initiate wastewater recycling - recycled wastewater could be used for snow making, which would provide a

beneficial use of wastewater system and would conserve pristine water supply.

**Response** The District in their Land Disposal Maximization Plan (February 2002) evaluated the feasibility of many options that would either minimize flow to the land disposal facilities or maximize the land disposal capability of the facility. Utilizing wastewater for snowmaking was not one of the chosen alternatives due to high cost and need to store and/or dispose of wastewater late in the season as opposed to the beginning of the snow season. Therefore, this alternative was not considered for implementation.

**Comment** 6. Require the hauling of excessive stored wastewater to another facility.

**Response** Comment noted. The District's 2002 Land Disposal Maximization Plan also evaluated the feasibility of transferring excessive stored wastewater to another facility but was not chosen as a selected alternative due to high cost and other environmental impacts (roads and air quality etcetera) and hence, was not considered for implementation.

**Comment** 7. Should direct the District to prepare a plan to avoid accumulating volumes of wastewater that exceed the storage and disposal capacity.

**Response** Comment noted. In January 2000 RWQCB issued Cease & Desist (C&D) Order requiring the Discharger to implement interim measures and long term improvements to the wastewater facility to address its storage capacity problems and avoid unauthorized discharges to surface waters. The C&D also imposed a limit of no more than four residential connections per year to the wastewater treatment system. In response to the C&D Order, the Discharger implemented several measures to address its capacity problems and had evaluated the feasibility of many options to avoid accumulation of volumes of wastewater that exceed the storage and disposal capacity. In February 2002, in response to a requirement of C&D Order, the Discharger submitted a Land Disposal Maximization Plan for the facility, evaluating the feasibility of many options to eliminate volumes of wastewater exceeding the storage and disposal capacity. Two such options that were implemented by the District are Water Conservation Plan and Inflow/Infiltration (I/I) Reduction Program. But according to the Discharger, the snowmelt and the rainfall are the two major contributors of inflow (over 65%) to the storage reservoir, which cannot be avoided.

**Comment**        8. Should require a tertiary level of treatment to facilitate the use of their wastewater effluent in a recycling program and not discharge into a drinking water source.

**Response**        RWQCB staff believes the requirement of adequate tertiary treatment to protect the beneficial use of the Bloods Creek and the downstream waters would be unreasonable and unnecessary at this time. Because the facility is permitted to discharge only during extremely wet season, and only when effluent can receive at least 20:1 dilution from the receiving water, during which time the public use of the Creek is expected to be relatively low. In addition, this requirement is consistent with both the DHS's wastewater treatment standards for reclamation and the approach taken by Regional Board staff in the permits issued for other similar discharges.

**Comments Received from Stockton East Water District (SEWD) - April 15, 2005:**

**Comment:**        SEWD stressed that a NPDES permit for the Discharger not be considered. SEWD believes that the Discharger, by implementing 2002 *Land Maximization Plan*, will have enough land disposal capacity for several back to back 100-yr storm events and still accommodate the current growth rate to the year 2015. If the Regional Board insists on issuing the permit, SEWD requests that tertiary treatment be required as a condition of any discharge to surface water.

**Response:**        Comment noted. The revised permit includes a provision that prohibits initiation of discharge to surface water until the Land Disposal Maximization Plan is fully complied with and it has been demonstrated to the satisfaction of the Regional Board. The permit also requires the Discharger to obtain a written concurrence from the Regional Board that the Discharger has maximized land application of the effluent prior to initiating surface water discharge. However, even with compliance with the Land Maximization Plan, wet winters and continued growth will result in the need for wastewater disposal to surface waters.

Regarding the requirement of tertiary treatment as a condition of any discharge to surface water, a requirement of tertiary treatment would be unreasonable and unnecessary at this time. The facility is permitted to discharge only during extremely wet seasons, and only when effluent can receive at least 20:1 dilution from the receiving water, during which time the public use of the Creek is expected to be relatively low. Additional tertiary treatment would provide minimal benefit due to the wastewater being highly diluted in the storage reservoir by precipitation. The TDS of the effluent is 80mg/l indicating that the municipal wastewater is highly

diluted prior to discharge to surface water containing an additional 20:1 dilution.

**Comments Received from Bear Valley Water District (April 25, 2005):**

The Discharger believes that it currently does not have sufficient land for disposal of effluent originating within the District and it is obligated to plan for providing this service year-around. Since suitable private land is not available except through condemnation, lawful discharge to Bloods Creek (through exercising this NPDES permit) is the only means available to it.

Following comments and their Finding numbers correspond to the Findings in tentative permit originally issued on March 25, 2005.

**Comment:** 1. Finding 2 - The Discharger states that only 74 acres of the available 160 acres are currently available and suitable for effluent disposal in lieu of 94 acres as stated in Finding 2 of the Tentative Permit. Discharger also states the suitable acreage will be reduced to 60 acres after the temporary USFS special use permitted land is reverted back to the Forest service in 2011.

**Response:** Comment noted. The acreage information in Finding 2 of the Tentative Order was obtained from the Report of Waste Discharge Requirements while the information regarding maximization of land (in Discharge Prohibitions) was from April 2002 Status Report submitted in response to a requirement of C&D Order No. 5-01-209. In 2000, prior to adding USFS's 40 acres, the Discharger has actually irrigated approximately 61 acres of the 120 total acres of disposal land with the expanded irrigation system. The Status Report also spells out that only 60 percent (24 acres) of the 40 acres of USFS special use permitted land would be suitable for irrigation. From this recent irrigation effort, the staff concluded that the discharger has at least 85 acres (61+24) of disposal land that is suitable for irrigation during summer months. Therefore, the Discharge Prohibitions of the Tentative Order requires that the Discharger utilize a minimum of 80 acres of the total 160 acres suitable for irrigation disposal prior to initiating surface water discharge. Also, due to lack of adequate information on the current summertime disposal operation and the actual acreage available for irrigation, the tentative permit has been revised to include a provision that requires the Discharger to provide a revised water balance with their maximization of land disposal report. Along with the revised water balance, the Discharger is also required to provide accurate data on acreage available for irrigation. The provision also requires the Discharger to request USFS for continued use of leased land beyond existing leased period.

**Comment:** 2. Finding 4 – The District believes that it has demonstrated through preliminary “Capacity Curves” that the discharge from the effluent storage reservoir is necessary to avoid the risk of overflow during wet winters.

**Response:** Comment Noted. Regional Board staff does not accept the subject Capacity Curves because they are based on assumptions that are not fully substantiated. Therefore, the tentative permit has been revised to include a provision that requires the Discharger to provide a revised water balance with maximization of land disposal report prior to initiation of surface water discharge.

**Comment:** 3. Finding 27 – The Discharger believes the description used for waters of the Bloods Creek as ‘pristine’ is not accurate due to summer cattle grazing.

**Response:** Comment noted. During the time of year when the surface discharge is proposed, Bloods Creek consists of snowmelt runoff and is pristine.

**Comments:** 4. Discharge Prohibitions A.4 – The Discharger claims the peak Bloods Creek flows could occur as late as mid June and hence, request that the discharge be allowed up until the end of June.

**Response:** Comment noted. Regional Board staff agrees with the Discharger. This situation was demonstrated in 2005 when snow remained on the irrigation area until early July. The prohibition in the Tentative Order has been revised to extend the discharge period to 1 July.

**Comment:** 5. Effluent Limitation B.1 – The District would like to discharge based on the design conditions represented by the Capacity Curves and only during snowmelt season.

**Response:** Comment Noted. Regional Board staff has not concurred with the Capacity Curves because they are based on assumptions that are not fully substantiated or justified. The revised tentative permit includes a provision that requires the Discharge to provide an updated water balance with appropriate justification for assumptions, if any, prior to the initiation of surface water discharge.

**Comment:** 6. Effluent Limitation B.1 – The Discharger contends that the discharge may or may not feasibly meet BOD and TSS limitations because they are for effluent from the storage reservoir (potential for algal growth) while the Land Disposal Order WDR 5-01-208 applied to effluent from the treatment pond.

**Response:** Comment noted. The proposed Order requires all effluent samples shall be collected downstream from the last connection through which wastes can be admitted into the outfall. Effluent samples should be representative of the volume and quality of the discharge released to Bloods Creek. The proposed Order acknowledges that pond systems have potential for algal growth resulting in elevated suspended solids (TSS). However, during time of year of proposed surface discharge, the storage reservoir has very low temperature and will be experiencing very high snow melt inflow and seepage which further dilutes the strength of the treated effluent. Based on treatment efficiency of the plant and reservoir dilution, the discharge is capable of consistently meeting the BOD and TSS effluent limits.

**Comment:** 7. Fact Sheet Page 8 – BOD and TSS. The permit requires an average of 65 percent removal of BOD and TSS over each calendar month while the Fact Sheet requires 85 percent removal – why is it different?

**Response:** Comment noted. We agree. The Fact Sheet of the revised tentative permit will be corrected to reflect the 65 percent removal allowed by the Clean Water Act for pond treatment.